

REMARKS

Please reconsider the application in view of the above amendments and the following remarks. The Applicant thanks the Examiner for carefully considering this application.

Disposition of Claims

Claims 1-35 are pending in the present patent application. Claims 1, 14, 15, 20, 21, 23, 24, 34, and 35 are independent. The remaining claims depend, either directly or indirectly, on claims 1, 15, 21, 23, and 24.

Customer Number

Applicant respectfully notes that the present patent application is not linked to the Customer Number of the firm having the Power of Attorney for this matter. As a result, the information shown for the firm has not been updated. Accordingly, Applicant requests that the present case be associated with Customer No. 22511 and the address associated with Customer No. 22511 be used for all future correspondence. To this end, Applicant has attached an Application Data Sheet containing the correct information.

Claim Amendments

Independent claims 1, 14, 15, 20, 21, 23, 24, 34, and 35 have been amended to include the following clarifications: (i) the server-side cryptographic function generates a challenge string; (ii) the client-side cryptographic function generates a signed response string using a private key of a dial-up user in response to the challenge string generated by the server-side cryptographic function; (iii) the custom script dynamically linked library (DLL) encodes the signed response string and divides the encoded signed response string into a plurality of packets;

(iv) the PKI-Bridge combines the plurality of packets and decodes the resulted combination of data to obtain a reconstructed signed response string; and (v) the server-side cryptographic function verifies the reconstructed signed response string using a public key of the same dial-up user.

Dependent claims 8, 9, 17, and 29 have been amended to conform with changes made to the claims from the independent claims from which they, directly or indirectly, claim. Dependent claims 10, 11, 12, 26, and 27 have been cancelled.

No new matter has been added by way of these amendments, as support for these amendments may be found, for example, in paragraphs [0059] – [0062] of the Instant Specification and the Figures described therein.

Rejections under 35 U.S.C. §112

Claim 12 stands rejected under 35 U.S.C. §112 as being indefinite. Claim 12 has been cancelled. Accordingly, this rejection is now moot with respect to claim 12.

Rejections under 35 U.S.C. §103

Claims 1-35 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Chen et al., U.S. Patent No. 6,061,796 (hereafter “Chen”), in view of Shrader et al., U.S. Patent No. 6,772,341 (hereafter “Shrader”). To the extent that this rejection applies to the amended claims, the rejection is respectfully traversed.

Chen teaches a virtual private network (VPN) between a server and a client. Shrader teaches a system for processing signed data objects. The Applicants respectfully assert that Chen and Shrader, individually or in combination, do not teach or suggest all the claimed limitations included in the amended independent claims 1, 14, 15, 20, 21, 23, 24, 34, and 35.

Specifically, the recited claims of the invention teaches a method of transmitting data, *i.e.*, a challenge string or a signed response string, between a server and a client in a manner quite different from the method taught by Chen and Shrader.

Applicant admits that Chen describes transmitting data in packets; however, these packets are standard to the TCP/IP protocol. Once the system establishes a communication link by executing appropriate socket functions, the data packets are formatted in the form of Ethernet packets or analog signals. The packets contain “the original datagrams from the TDI layer.” (See, Chen col. 8, lines 45-55). Clearly, the data in the packets taught by Chen are not initially encrypted or encoded.

In contrast, the amended independent claims recited in the instant invention first encrypts or encodes the data and then divides the encrypted or encoded data into packets to be transmitted. (See, amended independent claims and Instant Specification, paragraph [0061]). Once the packets have arrived at their destination, the packets are then re-combined first and then decrypted or decoded to obtain the original data. (See, amended independent claims and Instant Specification, paragraph [0062]). Further, the steps of deconstructing data before transmission and reconstructing data after reception are done using Schlumberger proprietary Middleware (as clearly shown by the steps clarified in the amended independent claims), not standard TCP/IP functions. (See, amended independent claims and Instant Specification, paragraph [0040]).

Further, Shrader fails to teach what Chen lacks as is evidenced by the Examiner only relying on Shrader to teach “a directory service accessed by the server-side cryptographic function” (see, Office Action dated December 12, 2005, at page 4) and “encoding and decoding the signed response string” (see, Office Action dated December 12, 2005, at page 8).

In view of the above, Chen and Shrader do not teach or suggest all the limitations of

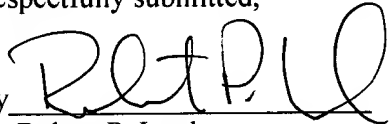
amended independent claims 1, 14, 15, 20, 21, 23, 24, 34, and 35. Therefore, amended independent claims 1, 14, 15, 20, 21, 23, 24, 34, and 35 are patentable over Chen and Shrader. Dependent claims are patentable over Chen and Shrader for at least the same reasons. Withdrawal of this rejection is respectfully requested.

Conclusion

The Applicant believes this reply is fully responsive to all outstanding issues and places this application in condition for allowance. If this belief is incorrect, or other issues arise, the Examiner is encouraged to contact the undersigned or his associates at the telephone number listed below. Please apply any charges not covered, or any credits, to Deposit Account 50-0591 (Reference Number 09469/006001).

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Respectfully submitted,

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Attachment (Application Data Sheet)

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